

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-9. (canceled)

10. (Currently Amended) An interface for reducing mechanical vibrations, which has a base connection element, a load connection element and at least one support element,

a) wherein at least a first energy converter system extends between at least one engagement point located on the base connection element and at least one engagement point located on the load connection element;

b) wherein at least one second energy converter system extends between at least one engagement point located on the support element and at least one engagement point located on the load connection element;

c) wherein the base connection element is connected to the at least one support element by means of at least one elastic pretensioning device ~~in such a way that the elastic pretensioning device can exert~~ for exerting a preload on the first energy converter system and on the second energy converter system;

c1) wherein the pretensioning device is embodied as an elastic pipe which surrounds the energy converter ~~actuator~~ systems; and

d) wherein the load connection element has a part located in an intermediate space between the base connection element and the support element, and a part located outside the intermediate space between the base connection element and the support element.

11. (Previously Presented) The interface as claimed in claim 10, characterized in that the energy converter systems have at least one of the following elements:

a piezoactuator,

a shape memory alloy actuator,
an electrorheological or magnetorheological fluid actuator or fluid damper, or
an electrostrictive or magnetostrictive actuator.

12. (Cancelled)

13. (Currently Amended) The interface as claimed in claim 10, characterized in that at least one sensor system is connected to the load connection element for determining at least one of the following parameters: travel, and/or velocity, and/or acceleration, and/or force ~~is connected to the load connection element.~~

14. (Cancelled)

15. (Currently Amended) An arrangement for reducing mechanical vibrations, characterized by

an interface as claimed in claim 10,

at least one system which acts as at least one of the following: a movement sensor, and/or an acceleration sensor, and/or a velocity sensor, and/or a force sensor, and

an electronic circuit which generates, from a signal of the system which acts as at least one of the following: a movement sensor, and/or an acceleration sensor, and/or a velocity sensor, and/or a force sensor, a target function for actuating the energy converter systems of the interface.

16. (Previously Presented) An arrangement for reducing mechanical vibrations, characterized by

an interface as claimed in claim 15, and

an electronic circuit for passive or semiactive vibration reduction.

17. (Currently Amended) An arrangement for reducing mechanical vibrations, characterized in that a plurality of interfaces as claimed in claim 10 are connected in ~~series cascade~~ such a way that in each case the base connection element of the

following interface is connected to the load connection element of the preceding interface.

18. (Currently Amended) An interface for reducing mechanical vibrations, comprising:

a base connection element;

a support element separated from the base connection element by an intermediate space;

a load connection element having a first part and a second part~~separated from the base connection element by an intermediate space~~, said first part being located in said intermediate space, and said second part being located outside of said intermediate space;

~~a support element;~~

~~an actuator system including~~

a first energy converter system extending between a first engagement point located on the base connection element and a second engagement point located on the load connection element, and

a second energy converter system extending between a third engagement point located on the support element and a fourth engagement point located on the load connection element; and

an elastic pretensioning device connecting the base connection element to the support element in such a way that the elastic pretensioning device exerts a preload on the first energy converter system and on the second energy converter system, the pretensioning device being embodied as an elastic pipe which surrounds ~~at least a part of~~ said first and second energy converter ~~actuator system~~.

19. (Previously Presented) An interface as recited in claim 18, characterized in that said first and second energy converter systems include at least one active element selected from the group consisting of

a piezoactuator,

a shape memory alloy actuator,

an electrorheological fluid actuator,

a magnetorheological fluid actuator,
a fluid damper,
an electrostrictive actuator, and
a magnetostrictive actuator.

20. (Cancelled)

21. (Previously Presented) An interface as recited in claim 18, characterized in that at least one sensor system adapted to determine travel and/or velocity and/or acceleration and/or force is connected to the load connection element.

22. (Previously Presented) An interface as recited in claim 18, characterized in that at least one of said first and second energy converter systems can convert mechanical energy into electrical energy.

23. (Previously Presented) An arrangement for reducing mechanical vibrations, comprising:

an interface as recited in claim 18,
at least one system which acts as a movement sensor and/or acceleration sensor and/or velocity sensor and/or force sensor,
and an electronic circuit which generates, from a signal of said one system, a target function for actuating the energy converter systems of the interface.

24. (Previously Presented) An arrangement for reducing mechanical vibrations, comprising:

an interface as recited in claim 23,
wherein said electronic circuit cooperates with said energy conversion systems to accomplish passive or semiactive vibration reduction.

25. (Currently Amended) An arrangement for reducing mechanical vibrations, characterized in that a plurality of interfaces as recited in claim 18 are connected in ~~series in cascade~~ such a way that in each case the base connection element of the

following interface is connected to the load connection element of the preceding interface.